



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,673	04/13/2001	Shunpei Yamazaki	12732-029001	2129
26171	7590	08/19/2005	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			MENGISTU, AMARE	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/833,673

Applicant(s)

YAMAZAKI ET AL.

Examiner

Amare Mengistu

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on an interview made on April 6, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 7-9, 12, 13, 46, 49-51, 54 and 55 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 10, 11, 47, 48, 52 and 53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4,7-9,12,13,46,49-51,54,55 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shibata et al (6,147,451)** in view of **Kimura (6,518,941)** and **Jeong (6,008,801)**.

3. As to claims 4,7,9,12,46,49,51,54, **Shibata et al** (hereinafter **Shibata**) clearly teaches a display device comprising: a plurality of pixels (fig.1 [2]), each comprising a light emitting element (fig.3 [20]) comprising an anode (col.4 lines 42-47), a cathode (col.4, lines 42-47) and an organic compound layer provided there between (col.4, lines 46-44), a source signal line driver (fig.2 (32) [x-driver]) including a switching circuit for switching by means of a shift signal to plurality of pixels (fig.2 (33) "sample/ hold"). **Shibata** has failed to teach that an organic EL in which a digital video signal input to a switching circuit by means of shift signal to be inputted into said switching circuit.

The patent of **Kimura** is cited to teach that it is well known for an EL in which a digital video signal input (fig. 1(10210-10213)) to a switching circuit (fig.1 (10310-10313)) by means of shift signal (fig.1 (101)) to be inputted into said switching circuit (fig.1 (10310-10313)).

Art Unit: 2673

Therefore, it would have been obvious to one skill in the art at the time of the invention to have incorporated the digital signal by means of shift signal into the switching circuit as taught by **Kimura** into the organic EL display system of **Shibata**, because this will provide to have an improved luminous intensity of EL elements.

Shibata (as modified by **Kimura**) has failed to disclose inverting the polarity of the video digital signal into said switching circuit. **Jeong** clearly teaches that it is conventional to inverting the polarity of a digital video signal in the switching circuit (fig.7 (POL-O, POL-E) and (MUX 250, MUX 260) , col.4, lines 15-37, col.5, lines 50-56, col.6, lines 42-53).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to have used **Jeong's** polarity inversion method into the system of **Shibata**, because this will reduce the power consumption and chip size for the driver.

As to claims 8,13,50,55, it is well known for a telephone, camera or head up display a PC to have be a light emitting display.

Allowable Subject Matter

4. Claims 5-6,10-11,47-48,52-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Response to Arguments

5. Applicant's arguments with respect to claims 4-13,46-55 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Mengistu whose telephone number is (703) 305-4880. The examiner can normally be reached on M-F, T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.


Amare Mengistu
Primary Examiner
Art Unit 2673

A.M

August 16, 2005